

a) a metering reservoir, the metering reservoir having a volume, a reservoir inlet port, a reservoir outlet port, a top and a bottom;

b) a control valve, the control valve capable of allowing or stopping liquid from entering the metering reservoir;

c) a liquid level sensor, the liquid level sensor located so as to able to sense a fluid level within the metering reservoir and operably connected to an upper limit switch and a lower limit switch, the upper limit switch having an upper set point and the lower limit switch having a lower set point; and

d) an electronics module, the electronics module in electrical communication with the upper limit switch and the lower limit switch and further in electrical communication with the control valve

[The flow measuring apparatus of claim 1 ]wherein the volume of the metering reservoir between the upper set point and the lower set point has an error tolerance of less than 1%.

Claim 13 (Once Amended):

The flow measuring apparatus of claim [1]8 wherein the metering reservoir further comprises a breather vent, the breather vent located on the top of the metering reservoir.

Claim 15 (Once Amended):

The flow measuring apparatus of claim [14]8 further comprising a power supply, the power supply capable of supplying power to the electronics module, wherein the power supply comprises a battery, a solar panel, or current converted to a 12-volt dc power level.

Claim 16 (Once Amended):

The flow measuring apparatus of claim [1]8 further comprising a pump, the pump capable of removing fluid from the metering reservoir through the metering reservoir outlet port.

Claim 23 (Once Amended):

A flow measuring apparatus comprising:

a) a metering reservoir, the metering reservoir having a volume, a reservoir inlet port, a reservoir outlet port, a top and a bottom;

b) a tank outlet conduit, the tank outlet conduit capable of conducting fluid to the reservoir inlet port;

c) a control valve, the control valve capable of allowing or stopping liquid from flowing from entering the metering reservoir;

d) a liquid level sensor, the liquid level sensor located so as to able to sense a fluid level within the metering reservoir and operably connected to a lower switch, the lower limit switch having a lower set point;

e) a paddlewheel, the paddlewheel having a central pivot point and paddles, the paddles radiating from the central pivot point, the paddles capable of rotating about the central pivot point, the paddlewheel located within the tank outlet conduit and capable of rotating in response to fluid flow through the tank outlet conduit; and

f) an electronics module, the electronics module in electrical communication with the paddlewheel and the lower limit switch and further in electrical communication with the control valve

[The flow measuring apparatus of claim 17 ]wherein the volume of the metering reservoir has an error tolerance of less than 1%.

Claim 28 (Once Amended):

The flow measuring apparatus of claim [17]23 wherein the metering reservoir further comprises a breather vent, the breather vent located on the top of the metering reservoir.

Claim 30 (Once Amended):

The flow measuring apparatus of claim [29]23 further comprising a power supply, the power supply capable of supplying power to the electronics module, wherein the power supply comprises a battery, a solar panel, or current converted to a 12-volt dc power level.

Claim 31 (Once Amended):